Amendments to the Specification:

Please replace the paragraph beginning on page 10, line 6, with the following rewritten paragraph:

Also, the fuel cell system 10 includes an electronic control unit 70. The electronic control unit 70 is configured as a microcomputer including a CPU, RAM and ROM therein. The aforementioned pump 52, the shutoff valves 32, 60, 62, 64 and the pressure sensor 66 are electrically connected to the electronic control unit 70. Further, a power switch 72 and a warning ~~lump~~ lamp 74 are electrically connected to the electronic control unit 70. The power switch 72 gives commands for operating/stopping the entire in-vehicle power output system (the entire system) including the fuel cell system 10. The power switch 72 is operated by a driver. The warning ~~lump~~ lamp 74 provides the driver with a warning concerning failure of the fuel cell system 10.

Please replace the paragraph beginning on page 10, line 16, with the following rewritten paragraph:

When the electronic control unit 70 receives the command for operating the entire in-vehicle power output system from the power switch 72, the electronic control unit 70 opens the shutoff valves 32, 60, 62 (keeping the shutoff valve 64 closed), operates the pump 52, and operates the fuel cell 20. Also, when the electronic control unit 70 receives the command for stopping the entire in-vehicle power output system from the power switch 72, the electronic control unit 70 closes the shutoff valves 32, 60, 62, stops the pump 52, and stops the fuel cell 20. When the fuel cell 20 is stopped, it is determined whether there is leak of hydrogen gas. When there is leak, a warning ~~lump~~ lamp 74 is lit.

Please replace the paragraph beginning on page 15, line 14, with the following rewritten paragraph:

The aforementioned process in step S210 is performed in order to determine whether the pressure decrease speed when the pressure P starts to decrease is substantially equal to the pressure decrease speed when the pressure P is close to atmospheric pressure. When an affirmative determination is made, that is, when it is determined that both the pressure decrease speeds are substantially equal, the CPU determines that there is no hole in the electrolyte membrane, and the routine proceeds to "Return". Meanwhile, a negative determination is made in step S210, that is, when it is determined that both the pressure decrease speeds are not equal, the CPU determines that there is a hole in the electrolyte membrane, memorizes that a portion where there is abnormality (step S220) is the electrolyte membrane, and lights the warning ~~lump~~ lamp 74 (step S230). Determination on abnormality is made at time t3 in FIG. 4. After the process in step S230 is performed, the routine proceeds to "return".

Please replace the paragraph beginning on page 18, line 5, with the following rewritten paragraph:

(3) In the first embodiment of the invention, the pressure change speed dP1 is obtained using a difference between two detection values detected by the pressure sensor when the pressure P reaches the first pressure range Ra in the vicinity of atmospheric pressure. The pressure change speed dP2 is obtained using a difference between two detection values detected by the pressure sensor when the pressure P reaches the second pressure range Rb that is on the high pressure side of ~~the second pressure range Rb~~the first pressure range Ra. Instead, the configuration may be as follows. A time period Tm1 since the pressure P reaches the first pressure range Ra until the pressure P changes so as to be outside the first pressure range Ra is measured, and the pressure change speed dP1 is obtained by dividing the first pressure range Ra by the time period Tm1. A time period Tm2 since the pressure P reaches the second pressure range Rb until the pressure P changes so as to be outside the second pressure range Rb, and the pressure change speed dP2 is obtained by dividing the second pressure range Rb by the time period Tm2. With this configuration, the

accuracy of the pressure change speeds dP1, dP2 can be improved, and accordingly, the accuracy of detecting gas leak can be improved.

Please replace the paragraph beginning on page 19, line 28, with the following rewritten paragraph:

Accordingly, when an affirmative determination is made in step S370, that is, when it is determined that the previous time pressure XP is higher than the predetermined value P0 (at time t4 in FIG. 7), the CPU determines that there is a hole in the electrolyte membrane, and memorizes that a portion where there is abnormality (step S220) is the electrolyte membrane (step S380), and lights the warning ~~lump~~ lamp 74 (step S390). After the process in step S390 is performed, the routine proceeds to "return".

Please replace the paragraph beginning on page 24, line 16, with the following rewritten paragraph:

(8) In the first embodiment and the modified examples thereof, when the fuel cell 20 is operated, the shutoff valves 60, 62 are closed, the pressure change speeds are obtained at two time points during the period since the pressure P starts to decrease until the pressure P starts to increase, and the pressure change speeds are compared with each other, whereby leak of hydrogen gas is detected. Instead, the configuration may be as follows when the fuel cell 20 is started. First, when the fuel cell 20 is started, the shutoff valves 60, 62 are closed. Then, the shutoff valve 60 is opened, pressure is applied to the ~~hydraulic~~ hydrogen passage in the fuel cell until the value of the pressure sensor 66 reaches a first pressure value (for example, a value which is higher than the reference atmospheric pressure value by 50 kPa). When the value of the pressure sensor 66 reaches the first pressure value, the shutoff valve 60 is closed. Then, a pressure change speed dP11 of the pressure value detected by the pressure sensor 66 is obtained (the detection may be performed immediately after the pressure is applied to the ~~hydraulic~~ hydrogen passage, or after a predetermined time elapses). Subsequently, the shutoff valve 60 is opened, and pressure is applied to the ~~hydraulic~~ hydrogen passage in the fuel cell until the value of the pressure sensor 66 reaches a second pressure value (for example, a value which is higher than the reference atmospheric pressure value by 100 kPa). When the value of the pressure sensor 66 reaches the second pressure

value, the shutoff valve 60 is closed. Then, a pressure change speed dP12 of the pressure value detected by the pressure sensor 66 is obtained (the detection may be performed immediately after the pressure is applied to the ~~hydraulic~~ hydrogen passage, or after a predetermined time elapses). Then, as in the first embodiment, the two pressure change speeds dP11, dP12 are compared with each other, whereby leak of hydrogen gas is detected. With this configuration, it is possible to prevent wrong detection of gas leak as in the first embodiment.